

## NEVADA CLIMATE SUMMARY

FOR OCTOBER 1987
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# Office of the State Climatologist

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#### SYNOPSIS

Nevada was warmer than normal during October, and except for the northern 1/4 of the State, it was an unusually wet month. In fact, it was the wettest October of record at Desert Rock, and the second wettest at several locations, including Searchlight, Las Vegas Sunrise Manor, Ruth, and Smokey valley. The <u>warmth</u> was especially noted in the Extreme West, where Reno had the second warmest October since records began 100 years ago.

#### TEMPERATURE

Departure from normal temperatures were as high as 4-6 degrees above normal in portions of the Northwestern Region and in the center of the State, with Reno WSFO at  $+6^{\circ}$ , Glenbrook and Austin  $+5^{\circ}$ , and Yerington, Winnemucca and Orovada,  $4\ 1/2$  degrees warmer than usual. Smallest departures were logged at Hawthorne and Desert NWR near Las Vegas, where averages were only between 1 and 2 degrees below normal.

Reno had the second warmest October since records began 100 years ago, with an average of  $56.3^{\circ}$ , or six degrees above normal. The 10th month of 1933 was the warmest with a balmy  $59.6^{\circ}$ . Added to August (+4.4°) and September (+4.8°) the three month August-October period has been the warmest on record.

It wasn't quite so warm in the remainder of the Silver State, with Ely, Elko and Las Vegas about three degrees above normal. Laughlin reached 107° on the 3rd, just one degree below the all-time October State high of 108° set on the 1st in 1980 at Sunrise Manor in Las Vegas. Nearer the bottom of the temperature scale Wildhorse Reservoir reached 5 degrees on the 16th, but not near the State record of -10 at Mtn. City on October 26, 1970.

Heating requirements were below normal Statewide, generally in the 60-80% range, with cooling needs (air conditioning) being well above normal in Southern Nevada.

### PRECIPITATION

With the exception of portions of the Northeast and Northwest, October was a wet month in Nevada, with 2-3 times normal occurring over much of the State. Several locations had over 3 1/2 times the normal precipitation, with Desert Rock recording it's wettest October since records began in 1977, and several other sites logging the second wettest October of record, such as Searchlight (records began, 1913), Las Vegas Sunrise Manor (1952), Smokey Valley (1952), and Ruth (1958). All five of these climate stations

also observed the greatest 24 hour precipitation of record for October.

The greatest amounts of precipitation observed this month were: 2.74" at Sunnyside, northwest of Pioche; 2.40" at Key Pittman WMA, west of Caliente; 2.31" at Topaz Lake 4N; 2.25" at Searchlight; and 2.24" at Ruth. Key Pittman also had the greatest 24 hour total, with 1.65" on the 29th.

A Death Valley National Monument Ranger reported extremely intense rainfall on October 12th, with 5.75" falling in 3-4 hours at Grapevine R.S. in the northern portion of the Monument, and just a few miles southwest of Beatty. Water and debris blocked roads in the area.

A few locations in the northern part of the State had less than 25% of normal for October, including Wells with only .16", or 22%, and Gerlach .06" and Fish Springs Ranch (north of Reno in the Honey Lake Valley) .07", both less than 20% of normal.

The wet conditions in the Extreme West in the parched Reno-Tahoe-Carson Valley Area, were a welcome relief, as the July-September period was one of the driest on record here. The combination of warm temperatures, lack of rainfall, and resultant high evaporation, added to last winter's drought, have made it very difficult for plant growth in non-irrigated locations, as well as putting a strain on water supplies in this region.

#### SUNSHINE, WIND & EVAPORATION

Sunshine hours were below normal in the West, where Reno had 79% of the possible hours and a normal of 84%. In the South sun hours were well below normal as clouds and precipitation held sway more than usual, with only 70% of the possible and a normal of 86% at Las Vegas. Solar collectors and sun worshippers had a great month in the North, with 86% of the possible sunshine at Winnemucca and a normal of only 74%. In the East sun conditions were about normal with 75% at Ely.

With the exception of the North, where wind speed averages were near normal, October was a rather calm month in Nevada, with speeds averaging only 70-80% of normal. No damaging winds were reported, with 10,000 foot Slide Mtn. only reaching 50 mph in a gust on the 11th.

Evaporation was above normal in the Extreme West, where, for example, Reno had 4.46" of pan evaporation, about 1 inch above the usual amount. Elsewhere in the State, Boulder City had 8.28", or about 1" above normal, and Ruby Lake 4.49", a little over 1/2" over normal. At Silverpeak it was a different story, with the 5.06" reading being almost 2" below what can usually be expected during October.

 ${\hbox{NOTE}}\colon$  Welcome to three new weather observers--Lilly O'Toole at Reese River, Vickie Epsil at Smoke Creek, and Debbie Rosse, the observer at Wellington 3SE. Lilly has kept her own rain gage record since 1982, and Vickie for the past year.

BEST WISHES TO ALL FOR A FINE HOLIDAY SEASON

John W. James State Climatologist for Nevada

SELECTED CLIMATIC DATA FOR OCTOBER 1987

DEPAR- GREATEST PRECIP TURE 24 HR.	.4807 .37 30th .0704 23rd 1.46 + .57 .83 29th .98 + .65 .65 29th .79 + .53 .44 29th	1.23 + .76 .57 30th .85 + .02 .55 29th 2.24 +1.55 1.01 13th .1656 .10 23rd .6029 30th	.89 + .55 .58 28th 1.08 + .74 .50 12th 2.29 1.65 29th 2.1573 31st 1.64 +1.26 .54 29th	.5928 23rd .66 + .25 .40 24th 1.65 +1.44 .62 24th
LOWEST	19 20th 30 14th 34 14th 28 14th 33 25th	24 21st* 21 20th 14 20th 16 19th 5 16th	27 21st 37 26th 40 31st 34 30th* 25 15th	41 17th 49 30th 44 30th
HIGHEST	87 3rd* 92 4th* 79 6th* 86 2nd* 88 4th	86 3rd* 83 3rd 80 5th 81 1st 81 4th	86 6th* 82 6th* 93 5th* 81 4th 85 4th*	97 4th 97 6th* 96 5th
DEPAR- TURE	+3.5  +5.0 +3.5 +4.5	+3.5 +3.0 +2.0 +2.5	+3.0 +4.0  +3.0	+3.0
MEAN	53.0 59.0 54.0 55.5	52.0 51.0 45.0 48.0 45.5	55.0 57.0 62.5 53.5	66.0 72.0 66.0
MEAN DAILY MIN	33.0 40.0 41.0 38.0 40.0	32.0 32.0 25.0 28.0 24.0	37.0 45.0 47.0 41.0 37.0	49.0 60.0 52.0
MEAN DAILY MAX	73.0 78.0 67.0 73.0	72.0 70.0 65.0 68.0 67.0	73.0 69.0 78.0 66.0 71.0	83.0 84.0 80.0
ELEV	4190 3995 6350 3975 4375	4700 6012 6860 5650 6226	4980 5690 3950 6350 5625	2670 2525 3301
LOCATION	NORTHWESTERN Denio Fish Springs Glenbrook Lovelock Yerington	NORTHEASTERN Beowawe Ruby Lake Ruth Wells	SO. CENTRAL Dyer Goldfield Key Pittman WMA Lake V. Steward Smokey Valley	SOUTHERN Pahrump Boulder City Desert Rock Bunkerville

\* Latest of more than one occurrence.



